BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Applied Science Pearson BTEC International Level 3 Foundation Diploma in Applied Science Pearson BTEC International Level 3 Diploma in Environmental Science Pearson BTEC International Level 3 Extended Diploma in Environmental Science
Unit number and title	**Unit 10: Climate Change**
Learning aim(s)	**B:** Undertake research to develop an understanding of the evidence for atmospheric change related to 'greenhouse gases'
Assignment title	**'Recent climate change – natural or human intervention?'**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	Your centre has entered its first regional debating competition. The event will be held at the lecture theatre in the nearby college and the topic chosen is 'Recent climate change – natural or human intervention?' Four other centres have entered the competition and the winner will be chosen by the quality of the evidence put forward in support of either human intervention as the cause or natural changes in the Earth's climate.

Task	Produce a summary which **explains** the evidence for climate change which has taken place over the last 200 years. You must compare the effects of pre and post-industrial activities on the Earth's surface and its atmosphere. Your document should focus on: ● The change in CO_2 levels recorded over time, and the rise of CO_2 levels caused by industrial processes ● The carbon cycle and carbon sinks ● Changes to the Earth's movement (Milankovic cycles) You will also need to **analyse** data records of CO_2 levels from 1950 onwards in support of the conclusions for climate change and its effects on the Earth's biosphere and atmosphere. **Describe** evidence of extreme weather events, glacial retreat, sea level rise etc. to support the conclusion of relatively rapid climate change. **Explain** the causes of greenhouse gases and comment on their influence. You should include: o Natural and human influences in the production of CO_2 o CFC's o Methane o Nitrous oxide **Explain** the effects of human activities on the future atmosphere.

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Checklist of evidence required	A report that includes: ● A summary and **comparison** of our knowledge of climate change before and after industrialization ● An **analysis** of CO_2 levels over time ● A **description** of extreme weather events ● An **explanation** of the causes of greenhouse gas emissions and their effects ● An **explanation** of the effects of human activities on the future atmosphere

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria, you must show that you are able to:
B.D2	Compare the effects of pre and post-industrial activities on the Earth's surface and its atmosphere
B.M2	Analyse the evidence related to global warming and climate change
B.M3	Explain the effects of anthropogenic activities on the future atmosphere
B.P2	Describe the evidence linking global warming to industrialisation
B.P3	Describe the factors which cause greenhouse gases
B.P4	Explain the possible effects of climate change on the biosphere and atmosphere
Sources of information to support you with this Assignment 1.	https://www.unenvironment.org/explore-topics/climate-change climatechangeconferences.com › ... › Forum globalclimateforum.org en.wikipedia.org › wiki › Climate_change_mitigation climate.nasa.gov › evidence climatechangeconnection.org › science › climate_causes

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